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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,507	09/28/2001	Kang-Hyun Jo	678-624(P9625)	5307
28249	7590	01/25/2005	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			TORRES, JUAN A	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/966,507

Applicant(s)

JO ET AL.

Examiner

Juan A. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 4 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the Korean Industrial Property Office on Oct. 19, 2000 and assigned Serial No. 2000-61478. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

### ***Specification***

The disclosure is objected to because of the following informalities:

In page 2 line 26 the recitation "to y switch" is ambiguous. It is suggested to be changed to "to switch".

In page 5 line 21 the recitation "baseband analog ASIC (BBA)" is ambiguous. It is suggested to be changed to "baseband analog (BBA) Application Specific Integrated Circuits (ASIC)".

Appropriate correction is required.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: In line 3 of claim 1 the recitation "to for" is suggested to be changed to "to".

Claim 4 is objected to because of the following informalities: In line 5 of claim 4 the recitation "the radio receiver for the transmission burst period" is suggested to be changed to "the radio transmitter for the transmission burst period".

Claim 6 is objected to because of the following informalities: In line 5 of claim 6 the recitation "the radio receiver for the transmission burst period" is suggested to be changed to "the radio transmitter for the transmission burst period".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Gillig (US 6185411).

As per claim 1 Gillig discloses an apparatus for generating transmission local oscillation signals and reception local oscillation signals in a mobile wireless terminal (column 1 line 21), with a first phase locked loop (PLL) block configured to for generate a transmission local oscillation signal (figure 1 block 109 and figure 2, column 1 line 57); a second PLL block for generating a reception local oscillation signal (figure 1 block 108 and figure 2, column 1 line 56-57); and a controller configured to control the first PLL block to operate before a minimum time period required for the first PLL block to lock up from the start point of a transmission burst period, and to control the second PLL block to operate before a minimum time period required for the second PLL block to lock up

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from the start point of a reception burst period (figure 1 block 110 and figure 3 block 301, column 4 line 39-46).

As per claim 2 Gillig discloses an apparatus for generating a transmission local oscillation signal and a reception local oscillation signal in a mobile wireless terminal (column 1 line 21), with a first PLL block configured to generate the transmission local oscillation signal (figure 1 block 109 and figure 2, column 1 line 57); a second PLL block configured to generate the reception local oscillation signal (figure 1 block 108 and figure 2, column 1 line 56-57); and a controller for controlling the first PLL block to operate before an end point of a reception burst period and controlling the second PLL block to operate before an end point of a transmission burst period (figure 1 block 110 and figure 3 block 301, column 4 line 39-46).

As per claim 3 Gillig discloses a method of generating a transmission local oscillation signal in a mobile wireless terminal (column 1 line 21) and a reception local oscillation signal having a first PLL block for generating the transmission local oscillation signal and a second PLL block for generating the reception local oscillation signal, controlling the first PLL block to operate before a minimum time period required for the first PLL block to lock up from the start point of a transmission burst period (figure 1 block 110 and figure 3 block 301, column 4 line 39-46); and controlling the second PLL block to operate before a minimum time period required for the second PLL block to lock up from the start point of a reception burst period (figure 1 block 110 and figure 3 block 301, column 4 line 39-46).

As per claim 4 Gillig discloses applying the reception local oscillation signal generated from the second PLL block to a radio receiver for the reception burst period (figures 1-3 block 116, column 6 line 16); and applying the transmission local oscillation signal generated from the first PLL block to the radio receiver for the transmission burst period (figures 1-3 block 117, column 6 line 16).

As per claim 5 Gillig discloses a method of generating a transmission local oscillation signal and a reception local oscillation signal in a mobile wireless terminal (column 1 line 21) having a first PLL block for generating the transmission local oscillation signal and a second PLL block for generating the reception local oscillation signal in a wireless terminal, controlling the first PLL block to operate before the end point of a reception burst period (figure 1 block 110 and figure 3 block 301, column 4 line 39-46); and controlling the second PLL block to operate before the end point of a transmission burst period (figure 1 block 110 and figure 3 block 301, column 4 line 39-46).

As per claim 6 Gillig discloses applying the reception local oscillation signal generated from the second PLL block to a radio receiver for the reception burst period (figures 1-3 block 116, column 6 line 16); and applying the transmission local oscillation signal generated from the first PLL block to a radio receiver for the transmission burst period (figures 1-3 block 117, column 6 line 16).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hietala (US 6327319) discloses a phase detectors for phase locked loops and, more particularly to, a phase detector with frequency steering for phase locked loops. Kosiec (US 5497126) and (US 5838202) discloses a radio communication transceivers and, more particularly, to a phase synchronization circuit and method therefor for a phase locked loop in a radio communication transceiver. Momtaz (US 5950115) discloses a High Speed Phase Lock Loop Having High Precision Charge Pump With Error Cancellation, and High Speed Phase Lock Loop Having Constant Bandwidth. Gillig (US 5448763) discloses a radio communication transceivers and, more particularly, to an apparatus and method for operating a phase locked loop frequency synthesizer responsive to radio frequency channel spacing in a radio communication transceiver. Tatezuki (JP 09205394) discloses how to transmit a signal from a transmitter to a receiver by selecting a transmission frequency from the transmitter differently in the case of transmission directly to the wireless receiver from the case of transmission via a repeater to the receiver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT 12-14-2004

  
MOHAMMED GHAYOUR  
SUPERVISORY PATENT EXAMINER